Timely Hints about Building.

Masters of the art of building are as rare as genius. It has been said, truly enough, that though a man should build for himself twenty houses, he would find before the last is finished, that he had made some error, either in the mode of building or in the arrangement of the interior. Where one has little or no experience in building, it is the better way to contract with some competent mechanic to furnish a full plan, with specifications &c., covering everything, which will show at a glance whether you are to have a comfortable dwelling or barely a wall and roof shelter. The cause of so many errors in building houses, lies in the want of suitable plans, and the haste with which we build. We form plans and build, as though a house was a thing of a *day*, and not to endure for *two hundred years*, and serve the purposes of a human habitation—as it should be. Every generation, therefore, is obliged to rebuild, or rearrange the old house at a heavy expense.

Never build in a hurry. Get everything in readiness and then give your mechanics *time*. They will do their work better, and will, in most cases, make a reduction of 15 to 25 per cent. on what they would charge you, if obliged to force the job through. Have your plans well matured, for rest assured you will have to pay double for all extra jobs. Whoever looks to economy, more than to outside show, or wishes a large amount of inside room for a small sum of money, should build a *square* house; as that form gives a much larger amount of inside room for its outside wall than any other. Let us illustrate this: A house 100 feet long by one foot in width, requires 202 feet of wall, and gives 100 square feet of inside room; make it 2 feet wide and you double the inside room, while you can only add 2 feet of outside wall. Here is one foot of room for each foot of wall. Make it fifty feet wide, and you have 5000 feet of inside room, or nearly 17 feet of inside room for one of wall. So it advances till you reach the square, which gives more inside room for its wall than any other quadrangle form. This is something worth thinking about, for while in the first case you would have to build 202 feet of wall and only get 100 square feet of room, in the latter you would only build 300 feet of wall and get 5,000 square feet of room; and if 100 square feet was all the room you wanted, you would get it by building a house 10 feet square, making 40 feet of wall, and save 162 feet of wall,—or more than three-fourths of the expense for this part of your house. We request particular attention to this statement, for it is a part of the subject which escapes the notice of builders generally.—The shape of your house simply, if large, may make several hundred dollars difference in the expense.

The latter part of January and early part of February, is perhaps the best time in the year to get out timber for building, both as regards the quality of all timber trees, or the convenience of farmers and others. Experience proves that timber felled at this season will resist decay twice as long as if cut in March or any other month. Have your *floor joists* well seasoned. Most people think these may go into the building green, but it is a great error. They soon shrink and leave a large crack between the floor and baseboard. If you build of bricks, they should be laid wet, and the mortar should be thin, which will cause it to adhere strongly to the bricks, and give an eight inch wall as much solidity as one a foot thick where the bricks are laid dry. Brick walls should be laid hollow, (a hollow space between the outside and inside courses,) or they should be firred and lathed; otherwise dampness is sure to find its way into the rooms, rendering them disagreeable and unhealthy. If firred, pieces of lath should be laid in the courses of brick-work, to nail the firring strips to, instead of blocks of scantling which will shrink and become loose, while the other becomes firmer as the wall settles.

To prevent plaster cracks in the corners of the rooms, have the firring strips nailed firmly together before being put up, and then strongly nailed to the walls. Some may think that these things belong wholly to mechanics to know, but not so; every one who ever expects to build a dwelling, a barn, a stable, should make himself familiar with the details, that he may detect any attempt on the part of mechanics to slight their work.—[Farmer's Companion.

The Mammoth Tree from California.

The clipper ship Messenger, which recently arrived here from San Francisco, brought on deck one of the greatest natural curiosities that could be offered to the public. It is nothing more nor less than a section of the great California tree; the largest single tree that has been discovered in the modern Eldorado, the largest in the world. This tree was situated on the south westerly slope of a hill, in a soil fifteen feet in depth. Its roots extended in all directions for more than fifty rods upon the hillside, and downwards to the depth of the soil. At the ground the circumference was 92 feet, 4 feet above that it was 88 feet, and 10 feet above 66 feet, and the tapering of the shaft was very gradual and symmetrical upwards for 325 feet to its very top. From actual estimate of its anual layers, it is more than 3,000 years since this unparalleled majesty of cedar was a sapling in its teens. Then for a large space on the outer surface next to the bark the rings of growth are so thin as not to be distinguished from each other.

The outward dimensions of the main trunk were about the same as the Bunker Hill monument. From actual measurement it contains more than three hundred cords of wood. A vast deal of labor was required to level such a mountain of wood to the earth, and after almost incredible toiling with augurs, axes and saws at its foot, it finally fell prostrate; the crash can neither be imagined nor described, the jar of the hill was perceived for miles, as if an earthquake had passed that way. The base having been much burned by the fire of the Indians, it was necessary, in order to get a perfect section, to chop the tree entirely through twice. After about one hundred and fifty days incessant labor this was effected, and the block of ten feet in length was severed from the huge pile. But the next thing was to transport such a mass, and by any available means at hand it was apparently as impossible as it would have been to move the hill where it laid. It was finally bored through the centre, the earth was dug away from one end, and a fire built underneath, which was left burning for several weeks. The auger hole made a good chimney, which was grandually developed by the action of the fire until the men could work inside with their axes. In this manner it was excavated to within two feet of the outer surface. It was afterwards moved down the hill with levers for more than a mile, then drawn eighteen miles by twenty oxen to Mentinut, and then shipped to San Francisco.

At San Francisco, only about fifty miles from the place of its growth, it was the greatest curiosity ever exhibited. The whole city of men, women and children flocked to see it. One hundred men could easily stand inside the hollow at the same time, and a six foot man rode a full sized horse through it without touching his hat to the upper surface. The great curiosity is to be exhibited in this city for a short time before its removal to New York and Boston.—[Phil. Ledger.

LIQUID GLUE.—A strong liquid glue, that will keep for years without changing, may be made by placing in a glazed vessel a quart of water and about 3 lbs of hard glue. This is to be melted over a gentle fire in a glue-pot and stirred up occasionally. When all the glue is melted, drop in gradually a small quantity of nitric acid, when effervescence will take place. The vessel is to be taken off the fire and allowed to cool. Liquid glue made in this manner has been kept for more than two years in an uncorked bottle without any change. It will be useful for many trades, where a strong glue is required, without the trouble of melting.

The Rev. Eleazer Williams, the "Bourbon," that some persons suppose to be among us, is on a visit to Washington, where he is quite a "lion." The fair and fashionable have rushed to get introductions to him.

The Almaden Quicksilver Mines.

Everybody knows there is plenty of gold in California: but very few persons in the Atlantic States are aware of the fact that she has inexhaustible quicksilver or cinnabar mines. The Almaden mines and works are situated in the bosom of the hills which hem in the Santa Clara Valley, upon the east, at a distance of about twelve miles from the city of San Jose, and say sixty miles from San Francisco. No part of California presents a more beautiful scene than the Santa Clara Valley. Here nature is surpassingly lovely. The fine natural road passes along the banks, and anon across the waters of the gently murmuring Guadalupe: the music of birds mingles with the soft sighs of the balmy breeze; the plain is covered in its robe of richest green, sometimes dotted with great herds of wild cattle, and thousands of timid antelope, while here and there the husbandman is breaking up the rich soil, preparing to draw from the earth those rich stores which have not their parallel in any other country on the face of the globe.

About ten miles from San Jose, the road to the mines begins to wind around and between the hills, gradually ascending, the remainder of the distance, until you reach the mines. These mines were discovered in 1845, by one Castaneres, a commissioner of the Mexican government. The commissioner in traveling through this region, found considerable quantities of cinnabar in the hands of the Indians, who dug it up for the beautiful vermillion which it contains in large proportions, and which was extensively used by the savages in coloring their faces. Castaneres seems to have been totally unacquainted with the appearance of precious ores, but was attracted by the brilliance of some very fine specimens of the cinnabar, which were shown him, and supposing it to be gold, he sought the mines and "denounced" them, under the old Spanish mining laws, thus securing to himself the benefits of his discovery. Investigation, of course, showed that the "gold" was "quicksilver," and Castaneres' right was bought out by a company of English capitalists, who engaged in the enterprise with a spirit and energy meriting the success which has crowned their efforts. The ore is believed by the best judges to be inexhaustible. It does not run in veins; on the contrary, the hills in which the shafts have been sunk, seem to be great masses of cinnabar. If the metal does lay in veins, neither their depth or width have yet been ascertained, although immense quantities of the ore have been brought to the surface.

The works are situated in a little valley at the foot of the hills which contain the treasure, and the buildings for furnaces, the offices, stables, and residences of the operatives, altogether form a prosperous village, resembling, in a measure, some of the manufacturing villages of the Atlantic States. With the number of furnaces in operation, in 1851, from one hundred and seventy-five to two hundred hands were constantly employed. Over $300,000 were expended by the company in the preparations necessary prior to the commencement of remunerating operations. The current expenses were then about $40,000 per month, and the yield of quicksilver about 7.500 pounds for the same period,—worth $65,000. Extensive additions and improvements of the works were being made, which would treble the produce of the mines.

The cinnabar was brought down from the hills, on pack mules. It was in contemplation to construct a railway to perform the duty, and thus effect a great saving. Large and improved furnaces were in progress of construction; and in every department, no capital or labor is spared necessary to secure the benefits arising from experience, or afforded by the genius of the inventor.

The furnaces then in use were what are known as the "cylinder." The cinnabar, having been broken in small pieces, is thrown into the cylinder, and subjected to an almost white heat, which expels the metal in the form of vapor. The vapor passes through a retort and condenser, and is then drawn off ready for bottling. To our mind, this simple process is one of the wonders of nature. When we consider the great weight of quicksilver, and remember that its specific gravity is such that a heavy piece of iron so far from sinking in it, will hardly make an impression upon its surface, it seems indeed surprising that the subtle metal should have stolen itself away from its prison of vermillion and dross, upon the wings of a vapor. Surely the great laboratory of Nature presents nothing which evidences more strikingly the skill and power of Nature's God.

This mine takes its name from that of Almaden, sixteen miles north of Seville in Spain, which is the finest that exists with the exception of its namesake. There are mines in Carniola, Hungary, the Palatinate and Peru, but the Seville mine has always produced twice as much as the whole of them.

Within the company's grounds, and by the banks of a purling stream which supplies the place with the purest "mountain dew," is a mineral spring which we doubt not will prove a Saratoga, in future years, to those who seek restored health and energies at its fount. The water is quite as pleasant as any of the medicinal springs of New York or Virginia. Its analysis gives Carbonate of Soda, Chalybeate of iron, and a slight trace of sulphur. It is beautifully clear, light, sparkling, and effervescing.

The Guadalupe mine is also in successful and profitable operation; and when all the improvements now in process in getting the ore and extracting the metal shall be completed, these two mines will furnish sufficient quicksilver for the use of the whole world, and be a never-failing source of wealth to the proprietors and their descendants till the end of time.

Former Opinions of President Pierce.

The following opinions, formerly held by President Pierce will be read with some interest at the present crisis:

"He had only to say now what he had always said, that *he regarded slavery as one of the greatest moral and social evils—a curse upon the whole country—and this he believed to be the sentiment of all men, of all parties, at the north.*"

"He was free to admit that he had himself approached this subject of annexation (of Texas) with all his prejudices and prepossessions against it, and *on one ground alone—its slavery feature.* His convictions on this subject were, as had been stated, strong—not the result of any new light, but deeply fixed and abiding. The only difficulty in his mind ever had been, that of recognition by any new act of our government of the institution of domestic slavery, and he had found it extremely difficult to bring his mind to a condition, impartially to weigh the argument for and against the measure."—[Gen. Pierce's speech in reply to John P. Hale, at the North Church, in Concord, June 5, 1845, as reported in the New Hampshire Patriot of June 12, 1845.

"The democracy of the north never did endorse the doctrine (of Cass's Nicholson letter) and they never will. The democracy of this state are *unanimous* in the opinion, so far as we know, that congress has and should exercise the power and exclude slavery from California and New Mexico."—[N. H. Patriot, July 27th, 1849.

"I would take the ground of the non-extension of slavery—that slavery should not become stronger. But congress have only re-enacted the old law of 1793. Union loving men, desiring peace and loving their country, conceded that point—unwillingly conceded it, and planting themselves upon this law against this outburst of popular feeling, resisted the agitation which is assaulting all who stand up for their country. But the gentleman says the law is obnoxious! What single thing is there connected with slavery that is not obnoxious? Even the gentleman from Marlboro' (Dr. Batcheller, an abolitionist) cannot feel more deeply than I do on this subject." &c.—[Gen. Pierce's speech in the New Hampshire constitutional convention, Jan. 1, 1851.

Queen Victoria, at the opening of parliament, was attired in a splendid dress of satin tissue, over which was a robe of crimson velvet, ornamented with gold lace and ermine, and she wore a brilliant tiara of pearls and diamonds.